



## Employing adult learning theories in designing a module

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The adult learning principles defined by Knowles et al remain the scaffolding for the design of any module for adults.<sup>1</sup> In other words, considering the fact that adults learn in different ways and are quite different from each other, it is extremely important to keep in mind the learner attributes (viz. learning styles, stage of development of learner, motivating or barriers, etc.) while designing a module.<sup>1,2</sup>

As the process of becoming a member of the healthcare profession requires the acquisition of knowledge and

various skills, a scientifically designed module can play an important role in enabling them to become a part of the professional community.<sup>1,2</sup> Moreover, as most of the adult learning theories have developed from each other, almost all of them can be practically applied during the design of a module.<sup>1,2</sup> In fact, each of them can find a place in the module based on the intended learning objectives (Table 1).<sup>1-6</sup> In addition, learner needs, teacher needs, institutional needs, and the method of assessment used to evaluate whether the participants have achieved the

**Table 1.** Employing adult learning theories in designing a module

Adult theories of learning	Description	Use in module design
Social theories of learning	These theories acknowledge the importance of context and community in encouraging and guiding the learner.	Consider the social contexts of the anticipated learners. Responsibility of the educator to correlate with the learner and keep them interested
Self-determination theory	Intrinsic motivation plays a significant role in fruitful learning. Signifies importance of autonomy, relatedness, and competence.	Instructor should identify motivating factors for their learners, and incorporate in the module Useful to enhance learner involvement and aid teacher to attain session's learning objectives.
Behavioral theories	Strengthening of learning occurs due to 3 parameters, namely the frequency of the stimulus, time interval between the response & reward, and the persistent link between the stimulus and the reward.	These theories can be employed in designing those modules which focus on competency-based curriculum or training sessions.
Cognitive learning theories	These theories throw light on the mental and psychological process of the mind, and precisely deal with the perception and processing of the information.	Module focusing on clinical management of patients.
Experiential learning	Educators are made accountable to create & aid access to and organize experiences to expedite learning. It is the responsibility of the educator to plan the activity to ensure adherence to Kolb's cycle	Predominantly used in modules developing competencies Emphasis on both reflection in action and reflection on action.
Transformative learning theory	This theory highlights the importance of critical reflections in getting an insight into the learner beliefs and assumptions.	This theory enables the learner to know what they don't know, and once the learner realizes this, their interest and participation in activities increases enormously.
Humanistic theories	These theories are more learner-oriented. The goal is to develop persons who are self-directed and internally motivated for the learning.	Any module should have the elements to facilitate self-directed learning, as then only adults can plan, conduct, and evaluate their own learning.
Reflector model	The process of reflection is very much essential to bring about an action and then change.	A module should have provisions for reflections and feedback. These allow acquisition of both knowledge and skills, and assist educators to aid students to encourage autonomous learning.

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learning objectives remain key elements of a successful module.<sup>2</sup>

In conclusion, different adult learning theories can be employed in the design of a successful module based on the intended learning objectives, and thus the process of learning can be made mutually beneficial for both learner and the educator.

#### **Ethical approval**

Not required.

#### **Competing interests**

None.

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